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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/783,770	02/14/2001	Andrew G. Harvey	50325-0509 (3255)	2267
29989	7590	11/18/2004	EXAMINER	
HICKMAN PALERMO TRUONG & BECKER, LLP 1600 WILLOW STREET SAN JOSE, CA 95125			ZHONG, CHAD	
			ART UNIT	PAPER NUMBER

2152

DATE MAILED: 11/18/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/783,770

Applicant(s)

HARVEY ET AL.

Examiner

Chad Zhong

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 November 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-4, 6, 7, 18-27, 29, 30, 41-46, 48, 49, 60-62 and 64 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2-4, 6, 7, 18-27, 29, 30, 41-46, 48, 49, 60-62 and 64 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

OFFICE ACTION

1. This action is responsive to communications: Amendment, filed on 07/23/2004.
2. Claims 2-4, 6, 7, 18-27, 29, 30, 41-46, 48, 49, 60-62 and 64 are presented for examination. In amendment A, filed on 07/23/2004:
Claims 5, 8-17, 28, 31-40, 47, 50-59, 63 are cancelled.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
4. Claims 21, 2-7, 18-24, 25-30, 41-49, 60-62, 64 are rejected under 35 U.S.C. 103(a) as being unpatentable over Amberden, US 2002/0103818, in view of applicant admitted prior art (hereinafter AAPA).
5. As per claim 21, Amberden teaches a method of automatically subscribing a device in a network to a plurality of events applicable to a logical group of which the device is a member, comprising the computer-implemented steps of:

creating and storing a mapping that associates a plurality of devices with the logical group and that associates the logical group with one or more events that can pass over an event bus to which the device communicates (pg 5, [0066]);

receiving a subscribe request from the device that includes a device identifier that uniquely identifies the device and an event identifier (pg 7, [0143], [0148], [0149]; pg 8, [0153], [0155]);

looking up the device identifier and the event identifier in the mapping (pg 11, [0213]);

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looking up the device identifier and the event identifier in the mapping (pg 11, [0213]);

receiving a subject list in response thereto, wherein the subject list identifies all subjects to which the device should subscribe (pg 11, [0213], [0214]);

sending information to the event bus that requests the event bus to subscribe the device to all events in the subject list (pg 11, [0213], [0214], [0227]).

6. Amberden does not explicitly mention the term 'router', however, the type of device would have been a matter of design choice, it would achieves similar means to solve the same problem of grouping devices and identification of network events, further, AAPA discloses a distributed system lacking centralized group control and administration. Amberden's teaching of centralized control of notification to various devices via subscription. Hence, it would have been obvious to the person ordinary skilled in the art at the time of the invention to apply Amberden teaching to the prior art router system because it would have enabled centralized control of event distribution to the routers.

7. As per claim 2, Amerden teaches a method as recited in Claim 21, wherein sending information comprises subscribing the router to all the events that are in the mapping and associated with the router at an event gateway that is coupled to the event bus (pg 12, [0027], [0029]).

8. As per claim 3, Amerden teaches a method as recited in Claim 21, further comprising the steps of receiving application specific mapping information from an application program and updating the mapping using the application specific mapping information (pg 12, [0227]; pg 13, table 1.1; pg 8, [0153], [0155]; pg 7, [0143], [0145]).

9. As per claim 4, Amerden teaches a method as recited in Claim 2, further comprising the

steps of receiving application specific mapping information from an application program in XML format using a data access component that transforms the application specific mapping information from XML format into a canonical object model format (pg 9, [0185]-[0188]; pg 10, [0205]).

10. As per claim 6, Amerden teaches a method as recited in Claim 21, wherein sending information comprises generating, based on the mapping, a list of all the events that are in the mapping and associated with the router, and sending the list to an event gateway that is coupled to the event bus (pg 7, [0148]-[0151]; pg 12, [0229]).

11. As per claim 7, Amerden teaches a method as recited in Claim 21, wherein the mapping comprises an association of stored values that identify for each routers, an application, a group identifier, an event of the one or more events, a network device identifier, one or more published events, and one or more subscribed events (pg 7, [0148]-[0151]; pg 8, [0153], [0155]; pg 12, [0227]; pg 13, table 1.1).

12. As per claim 18, Amerden teaches a method as recited in Claim 1, wherein receiving the device identifier comprises receiving a publish request that includes a router identifier for one of the network devices in the logical group or- a group identifier of the logical group, and an event identifier (pg 8, [0153], [0155]).

13. As per claim 19, Amerden teaches a method as recited in claim 15, wherein sending information comprises looking up the router identifier and the event identifier in the mapping and receiving a subject list in response thereto (pg 10, [0206]; pg 11, [0213]).

14. As per claim 20, Amerden teaches a method as recited in Claim 15, wherein sending information comprises looking up the router identifier and the event identifier in the mapping,

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receiving a subject list in response thereto, and applying the subject list to the router at the event gateway (pg 10, [0206]; pg 11, [0213], [0214]; pg 12, [0229]).

15. As per claims 22-24, claims 22-24 are rejected for the same reasons as rejection to claim 21 above.

16. As per claims 25-30, claims 25-30 are rejected for the same reasons as rejection to claims 2-7 above respectively.

17. As per claims 41-43, claims 41-43 are rejected for the same reasons as rejection to claims 18-20 above respectively.

18. As per claim 44-49, claims 44-49 are rejected for the same reasons as rejection to claims 2-7 above respectively.

19. As per claim 60-62, claims 60-62 are rejected for the same reasons as rejection to claims 18-20 above respectively.

20. As per claim 64, Amberden teaches a computer-readable medium carrying a mapping service client Application Program Interface (API) comprising: instructions for a set of invokable operations that allow a client application program hosted in a router access to a mapping service runtime, wherein the invokable operations including at least

an attach operation that allows the client to open a persistent connection to the mapping service runtime, the attach operation receives one parameter, having at least an application context that is used to determine a mechanism available to the client (pg 3, [0049]);

a detach operation that tears down the persistent connection created by the attach operation (pg 11, [0210]);

an open operation that creates one or more non-persistent channels within the connection that

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is created by the attach operation (pg 8, [0160]);

a close operation that terminates the one or more non-persistent channels that are created by the open operation (pg 11, [0210]); and

a resolve operation that returns to the client a set of events (pg 7, [0144]), wherein the set of events is a combination of zero or more publish events and zero or more subscribe events, wherein the combination included in the set of events returned by the resolve operation is based on a specified selection criteria, and wherein the selection criteria includes at least a device identification, an event subject, and an action desired (pg 13-17, tables); and

wherein the mapping runtime service causes the client to receive all events that are associated with a logical group that includes the client, without the client having to store a list of the logical groups in which the client participates and without having to know what events pertain to the client or the logical groups (pg 13-17, tables; pg 3, [0047]; Fig 12).

Amberden does not disclose the client device be a router, the obvious rationale for applying Amberden's teaching to a system of routers is as stated for claim 21 above.

Conclusion

21. In the remark, the Applicant argued in substance that the groups of Amberden are groups of table fields, while in contrast the claimed "logical groups" are "groups of network devices".

In response to Applicant's argument, Amberden does teach the above limitation.

Referring to pg 3, [0040] and [0043] for example, Amberden explicitly mentions network computers, which are essentially network devices, the table fields Applicant mentioned are merely entries by various network devices on the network. Further, various groups of users are clearly defined for Amberden's system on page 8 of specification, wherein various users are grouped into logical groups and the groups comprises of plurality of users. Thus Amberden does teach of logical groups made up of network devices.

22. In the remark, the Applicant argued in substance that Amberden does not mention a plurality of events.

In response to Applicant's amendment, Amberden does teach the above limitation.

Referring to pg 7, [0144], Amberden explicitly teaches the notion of various events a user can request. Moreover, an event is broad in a sense that any action client takes would be considered an event, i.e. from movement of mouse to addition/deletion of data from a database. Thus Amberden teaches plurality of events initiated by clients.

23. In the remark, the Applicant argued in substance that Amberden does not mention automatically subscribing a network device to a plurality of events.

In response to Applicant's amendment, Amberden does teach the above limitation.

Referring to table 1.1, this table among others is an example of an entry within the database, this reflect what happens when user subscribes to a particular event. For instance, when user subscribes to a delete event (line 18), the database uses its sophisticated logics to automatically reflect this change. This is further supported on pg 19, [0301], wherein the automatic subscription process takes place. For section relating to various events within specification please refer to item 49 above. Lastly, Applicant argues about automation of subscriber process, however automation requires a client initiated subscription based upon client's needs, the system can not subscribe on behalf of the client without client's consent in one form or another. The invention does not deal with artificial intelligence wherein the device/apparatus can make independent intelligent choices. Thus, Amberden teaches automatically subscribing a network device to a plurality of events based on client's needs.

24. In the remark, Applicant argued in substance that Amberden does not discloses an event bus.

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In response to Applicant's amendment, Amberden does teach the above limitation.

Event bus concept is well known. For example, within the portal/gateway, there are hardware buses on the motherboard, event will travel on this link from client to the gateway. On a distributed level, an event bus is the physical link between the client and the gateway/server, after going through the claims as well as Applicant's specification, the 'event bus' acts nothing more than a transportation link, although Amberden does not explicitly state 'event bus', one must exist for the invention to be functional. Thus, Amberden teaches event bus.

25. In the remark, Applicant argued in substance that Amberden does not disclose a device identifier.

In response to Applicant's amendment, Amberden teaches the above limitation.

Referring to pg 16, tables 2.7 and 3.1 for example, the device IDs is the owner ID, where the stream initiated, this is the same as ID of the physical device because it identifies the owner. Thus Amberden does teach device identifier.

26. In the remark, Applicant argued in substance that "searching" and "retrieval" are very different activities than the "receiving events" or the "sending information" recited in claim 1.

In response to Applicant's amendment, Amberden teaches they are one of the same.

Receiving and sending information of Applicant's claim 1 is based from a server perspective, server receives information and then send information back to client, this is a standard well known procedure in client server situations. Moreover, Amberden discloses searching or sending requests to server, which is same as server receiving; next Amberden teaches retrieval from the server which is the same as server sending information packets back to the client. Thus, Amberden teaches receiving events as well as the sending of information.

27. In the remark, Applicant argues in substance that Amberden does not teach device identifier or an event identifier.

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In response to Applicant's amendment, Amberden teaches the above limitation.

Device identifier was discussed under item 52 above. As for event identifier, referring to tables 2.7 and 3.1, Amberden discloses various events dealing with display and texts, these database entries identifies various events being serviced. Thus Amberden teaches the idea of event identifier.

28. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following patents and publications are cited to further show the state of the art with respect to "Method And Apparatus For Mapping Network Events To Names Of Network Devices".

- i. JP 2000-003334 Isomichi et al.
- ii. JP 2000-207362 Fukumoto et al.
- iii. US 5950188 Wildermuth.
- iv. EU 0375664 Mann et al.
- v. US 6694450 Kidder et al.
- vi. "Sun plans new offensive", InfoWorld, Framingham: May 17, 1999. Vol. 21, Iss. 20.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chad Zhong whose telephone number is (703) 305-0718. The examiner can normally be reached on M-F 7am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John A Follansbee can be reached on 703-305-8498. The fax phone numbers for the organization where this application or proceeding is assigned are 703-746-7239 for regular communications and 703-746-7238 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

CZ

November 15, 2004

A handwritten signature in black ink, appearing to read 'Dung C. Dinh', with a long horizontal flourish extending to the right.

Dung C. Dinh
Primary Examiner